

## Office Action Summary

Application No.

09/756,924

Applicant(s)

MISHIMA, NOBUHIRO

Examiner

Jingge Wu

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 8,9,11-23,25 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-7,10,24 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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***DETAILED ACTION***

Applicant's election with traverse of species III in paper No. 5 is acknowledged. Regarding to Applicant's argument in paper No. 5, Examiner believed that the species II is directed to a process of BTC coding combining with JBIG coding and the species III is also directed to BTC coding which are different inventions. Furthermore, the specification is clearly defined three different embodiments. Finally, there is clear evidence that three Japanese patents used as foreign priority documents to combine them into one US application. The examiner disagrees with Applicant that there not additional burden to the Examiner because the Examiner has the burden to find the prior art at least including specific BTC coding. Therefore, Claims 1-7, 10, 24, and 26 are now presented for prosecution. Claims 8-9, 11-23, 25 and 27 are withdrawn from consideration.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-7, 10 , 24, 26 are rejected under 35 U.S.C. 102(e) as being anticipated by US 5881173 to Ohmori.

As to claim 1, Ohmori discloses a coder comprising:

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an obtaining unit (1, fig. 6) that obtains a predetermined amount of image data in which each pixel is expressed by a plurality bits (fig. 6, fig. 19, note that main scanning and subsampling implied the unit is a scanner, thus, the predetermined amount has to be a page by page scanning);

a developing unit (2, fig. 6) that develops the image data on the virtual planes (bit planes), wherein the pieces of bit data of the same pixel are developed on the same virtual planes ( $B_{Pi} \ i=1-8$ , fig. 8-9, col. 7 line 48-col. 9 line 30); and

a coding unit (5, fig. 6) that performs entropy coding on the developed bit data in virtual plane unit (bit plane) (col. 7 line 64-col. 8 line 37).

As claim 2, Ohmori further discloses the pixel data is 8 bit (col. 7 line 54).

As to claims 4 and 6, the discussions are addressed with regard to claim 1 (fig. 4 and 6 ).

As to claim 5, Ohmori further discloses the coding unit (5, fig. 4 and 6) obtains a probability value of a target bit (x, fig. 11-12) from the reference bits and perform an arithmetic coding with prediction according to the obtained probability value wherein the target bit is a subject of coding and the reference bits are in predetermined position s relative to the target bit (col. 9 line 41-col. 10 line 36, col. 18 line 55-col. 19 line 24).

As to claim 7, Ohmori further discloses gray code conversion (10, fig. 6).

As to claims 10 and 26 , the claims are corresponding method and computer program claims to claim 1, the discussions are addressed with regard to claim 1.

As to claim 24, Ohmori further discloses decoding process (fig. 3c and col. 3 line 53-col 4 line 20, col. 18 lines 12-13).

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohmori.

As to claim 3, Ohmori does not explicitly mention each pixel is represented in a 2 bit by 4 bit matrix.

How to arrange of bits of pixel in the storage is a design choice.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to arrange bits the pixel in 2X4 bits in order to process the pixel efficiently.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6072909 to Yokose et al., US 6510247 to Ordentlich et al., US 6215421 to Kondo et al., and US 5960117 to Hiratani disclose methods for bit plane encoding.

**Contact Information**

Any inquiry concerning this communication or earlier communications should be directed to Jingge Wu whose telephone number is (703) 308-9588. He can normally be

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reached Monday through Thursday from 8:00 am to 5:30 pm. The examiner can be also reached on second alternate Fridays.

Any inquiry of a general nature or relating to the status of this application should be directed to TC customer service whose telephone number is (703) 306-0377.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Amelia Au, can be reached at (703) 308-6604.

The Working Group Fax number is (703) 872-9314.

Jingge Wu

Primary Patent Examiner

